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**CLAIM SUMMARY DOCUMENT**

Claims 1-34. (Canceled)

Claim ~~35~~<sup>2</sup>. (Currently Amended) A method for ~~inhibiting the action of TNF- $\alpha$  for treating nerve disorders of treating a nerve disorder mediated by nucleus pulposus in a mammal in need of such treatment, wherein said nerve disorder mediated by nucleus pulposus is caused by the liberation of TNF- $\alpha$  and compounds triggered by the liberation of or presence of TNF- $\alpha$ , comprising the step of by administering a TNF- $\alpha$  inhibitor comprising the step of:~~

(A) ~~administering a TNF- $\alpha$  inhibitor, wherein said TNF- $\alpha$  inhibitor is a therapeutically effective dosage to said mammal of said TNF- $\alpha$  inhibitor wherein said TNF- $\alpha$  inhibitor is selected from the group consisting of (i) a soluble cytokine receptor that blocks TNF- $\alpha$  activity, (ii) a monoclonal antibody that blocks TNF- $\alpha$  activity, and or (iii) a tetracycline or a chemically modified tetracycline that blocks TNF- $\alpha$  activity, to said mammal in need of such treatment thereby inhibiting TNF- $\alpha$  and treating said which when administered to said mammal treats a nerve disorder.~~

Claim ~~36~~<sup>2</sup>. (Previously Added) The method of claim ~~35~~<sup>1</sup>, wherein the mammal is human.

Claim ~~37~~<sup>3</sup>. (Previously Added) The method of claim ~~35~~<sup>1</sup>, wherein the tetracycline or chemically modified tetracycline is selected from the group consisting of: tetracycline, doxycycline, lymecycline, oxytetracycline, minocycline, dedimethylaminotetracycline and bases and salts thereof.

Claim 38. (Canceled)

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Claim <sup>4</sup>~~39~~. (Previously Added) The method of claim ~~38~~<sup>1</sup>, wherein said nerve disorder is nerve root injury.

Claim <sup>5</sup>~~40~~. (Previously Added) The method of claim ~~39~~<sup>4</sup>, wherein said nerve disorder involves pain.

Claim <sup>14</sup>~~41~~. (Currently Amended) The method of claim ~~38~~<sup>1</sup>, wherein said nerve disorder is caused by a herniated discs disc.

Claim <sup>24</sup>~~42~~. (Currently Amended) The method of claim ~~38~~<sup>1</sup>, wherein said nerve disorder is presents as sciatica.

Claim <sup>33</sup>~~43~~. (Previously Added) The method of claim ~~38~~<sup>1</sup>, wherein said nerve disorder involves pain.

Claim 44. (Canceled)

Claim 45. (Canceled)

Claim <sup>34</sup>~~46~~. (Previously Added) The method of claim ~~35~~<sup>1</sup>, wherein said TNF- $\alpha$  inhibitor is administered systemically or locally.

Claim <sup>35</sup>~~47~~. (Previously Added) The method of claim ~~35~~<sup>1</sup>, wherein said TNF- $\alpha$  inhibitor is administered parenterally.

Claim <sup>36</sup>~~48~~. (Previously Added) The method of claim ~~35~~<sup>1</sup>, wherein said TNF- $\alpha$  inhibitor is administered intramuscularly (i.m.), intravenously (i.v.), subcutaneously (s.c.), orally or rectally.

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Claim <sup>37</sup>~~49~~. (Previously Added) The method of claim <sup>36</sup>~~48~~, wherein said TNF- $\alpha$  inhibitor is administered i.v. by injection or infusion.

Claim <sup>38</sup>~~50~~. (Currently Amended) The method of claim <sup>36</sup>~~48~~, wherein said TNF- $\alpha$  inhibitor is administered ~~is administered~~ orally at a dosage of about 20 mg to about 1,500 mg.

Claim <sup>39</sup>~~51~~. (Previously Added) The method of claim ~~35~~, wherein said TNF- $\alpha$  inhibitor is a tetracycline and is administered at a dosage of about 100 mg.

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[Cont'd]  
Claims 52-57. (Canceled)

Claim <sup>15</sup>~~58~~. (Currently Amended) The method of claim <sup>14</sup>~~39~~, wherein said nerve disorder involves pain.

Claim <sup>6</sup>~~59~~. (New) The method of claim <sup>4</sup>~~39~~, wherein the mammal is human.

Claim <sup>16</sup>~~60~~. (New) The method of claim <sup>14</sup>~~41~~, wherein the mammal is human.

Claim <sup>25</sup>~~61~~. (New) The method of claim <sup>24</sup>~~42~~, wherein the mammal is human.

Claim <sup>7</sup>~~62~~. (New) The method of claim <sup>4</sup>~~39~~, wherein the tetracycline or chemically modified tetracycline is selected from the group consisting of: tetracycline, doxycycline, lymecycline, oxytetracycline, minocycline, dedimethylaminotetracycline and bases and salts thereof.

Claim <sup>17</sup>~~63~~. (New) The method of claim <sup>14</sup>~~42~~, wherein the tetracycline or chemically modified tetracycline is selected from the group consisting of: tetracycline,

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doxycycline, lymecycline, oxytetracycline, minocycline, dedimethylaminotetracycline and bases and salts thereof.

Claim ~~64~~<sup>26</sup>. (New) The method of claim ~~42~~<sup>24</sup>, wherein the tetracycline or chemically modified tetracycline is selected from the group consisting of: tetracycline, doxycycline, lymecycline, oxytetracycline, minocycline, dedimethylaminotetracycline and bases and salts thereof.

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Cont'd  
Claim ~~65~~<sup>8</sup>. (New) The method of claim ~~39~~<sup>4</sup>, wherein said TNF-alpha inhibitor is administered systemically or locally.

Claim ~~66~~<sup>18</sup>. (New) The method of claim ~~41~~<sup>14</sup>, wherein said TNF-alpha inhibitor is administered systemically or locally.

Claim ~~67~~<sup>27</sup>. (New) The method of claim ~~42~~<sup>24</sup>, wherein said TNF-alpha inhibitor is administered systemically or locally.

Claim ~~68~~<sup>9</sup>. (New) The method of claim ~~39~~<sup>4</sup>, wherein said TNF-alpha inhibitor is administered parenterally.

Claim ~~69~~<sup>19</sup>. (New) The method of claim ~~41~~<sup>14</sup>, wherein said TNF-alpha inhibitor is administered parenterally.

Claim ~~70~~<sup>28</sup>. (New) The method of claim ~~42~~<sup>24</sup>, wherein said TNF-alpha inhibitor is administered parenterally.

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Claim <sup>10</sup>/<sub>71</sub>. (New) The method of claim <sup>4</sup>/<sub>39</sub>, wherein said TNF-alpha inhibitor is administered intramuscularly (i.m.), intravenously (i.v.), subcutaneously (s.c.) orally or rectally.

Claim <sup>11</sup>/<sub>72</sub>. (New) The method of claim <sup>10</sup>/<sub>71</sub>, wherein said TNF-alpha inhibitor is administered i.v. by injection or infusion.

Claim <sup>12</sup>/<sub>73</sub>. (New) The method of claim <sup>10</sup>/<sub>71</sub>, wherein said TNF-alpha inhibitor is administered orally at a dosage of about 20 mg to about 1,500 mg.

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Cont'd  
Claim <sup>20</sup>/<sub>74</sub>. (New) The method of claim <sup>14</sup>/<sub>41</sub>, wherein said TNF-alpha inhibitor is administered intramuscularly (i.m.), intravenously (i.v.), subcutaneously (s.c.) orally or rectally.

Claim <sup>21</sup>/<sub>75</sub>. (New) The method of claim <sup>20</sup>/<sub>74</sub>, wherein said TNF-alpha inhibitor is administered i.v. by injection or infusion.

Claim <sup>22</sup>/<sub>76</sub>. (New) The method of claim <sup>20</sup>/<sub>74</sub>, wherein said TNF-alpha inhibitor is administered orally at a dosage of about 20 mg to about 1,500 mg.

Claim <sup>29</sup>/<sub>77</sub>. (New) The method of claim <sup>24</sup>/<sub>42</sub>, wherein said TNF-alpha inhibitor is administered intramuscularly (i.m.), intravenously (i.v.), subcutaneously (s.c.) orally or rectally.

Claim <sup>30</sup>/<sub>78</sub>. (New) The method of claim <sup>29</sup>/<sub>77</sub>, wherein said TNF-alpha inhibitor is administered i.v. by injection or infusion.

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*C. Cont'd*  
Claim ~~79~~<sup>31</sup>. (New) The method of claim ~~77~~<sup>29</sup>, wherein said TNF-alpha inhibitor is administered orally at a dosage of about 20 mg to about 1,500 mg.

Claim ~~80~~<sup>13</sup>. (New) The method of claim ~~79~~<sup>4</sup>, wherein said TNF-alpha inhibitor is tetracycline and is administered at a dosage of about 100 mg.

Claim ~~81~~<sup>23</sup>. (New) The method of claim ~~79~~<sup>14</sup>, wherein said TNF-alpha inhibitor is tetracycline and is administered at a dosage of about 100 mg.

Claim ~~82~~<sup>32</sup>. (New) The method of claim ~~79~~<sup>24</sup>, wherein said TNF-alpha inhibitor is tetracycline and is administered at a dosage of about 100 mg.

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